

What is Claimed is:

1. A method for determining sleep stages, wherein a signal strength variance value which indicates variation of signal strength of signals detected by a biosignal detection means is calculated and the sleep stage is determined by using this signal strength variance value or a value derived from this signal strength variance value as an indicator value.
2. The method for determining sleep stages according to claim 1 wherein the indicator value is a variance value of signal strength data detected in a predetermined time period.
3. The method for determining sleep stages according to claim 1 wherein the indicator value is a signal of a difference between the variance value of signal strength data detected in the predetermined time period and a moving average of this variance value.
4. The method for determining sleep stages according to claim 1 wherein the indicator value is a signal of a moving average in a predetermined time period of a variance value, said variance value having been calculated from the signal strength data detected in the predetermined time period.
5. The method for determining sleep stages according to claim 1 wherein a signal strength variance signal value obtained by removing abnormal values from the signal strength variance

value or a value derived from this signal strength variance value is used as the indicator value.

6. The method for determining sleep stages according to claim 1 wherein the signal strength is the signal strength obtained as a reciprocal of a coefficient obtained by gain-controlling the signals detected by the biosignal detection means.

7. The method for determining sleep stages according to claim 1 wherein the biosignal detection means is non-invasive detection means.

8. The method for determining sleep stages according to claim 7 wherein the biosignal detection means comprises a pressure detection tube, a pressure detection sensor and a biosignal extraction means, and biosignals are extracted from pressure variation detected by the pressure detection sensor.

9. The method for determining sleep stages according to claim 1 wherein the biosignal detection means is a heartbeat signal detection means such as an electrocardiograph and a pulse rate meter.